



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

anatomy of the shining bodies in Porichthys. He concludes that these are true phosphorescent organs.

Thus far no specimens have been found to be luminous in the aquarium, and light has not been developed through electric stimulation, or by excitement through ammonia.

D. S. J.

Absence of Retinal Pigment in the Dogfish.—In his study of the retina of the common dogfish (*Mustelus vulgaris*) Schaper¹ has made the noteworthy observation that the retinal pigment cells, which in most vertebrates are loaded with dark pigment granules, are in this animal absolutely devoid of such particles.

P.

Pupa-Grafting in Moths.—The method of grafting young animals, as devised by Born for tadpoles, has been applied by Crampton² to the pupæ of moths. An injured pupa at best regenerates sufficient integument to cover the wound. Parts of two longitudinally split pupæ joined in natural proportions failed to unite, but anterior and posterior portions cut at any level united. Compounds slightly smaller than normal or enlarged by the insertion of a ring failed to coalesce. Fragments grafted on whole pupæ formed exactly those portions they would have formed had they remained on the original pupa. Pupæ are easily united sidewise or endwise, but in these, as in all other cases, the union is that of the integument and superficial parts only. The results of these experiments on the colors of different species are especially interesting. When individuals of two species having different colors were united so that their hæmolympths mingled, the outcome was almost always a double animal whose colors were normal. The same result was obtained from united males and females in species with differently colored sexes. The colors are probably produced, as a rule, through the action on the hæmolympth of a localized internal factor such as the "ferment" cytoplasm assumed by Mayer.

P.

Amitotic Followed by Mitotic Cell Division.—The observations of Gerassimoff, that cooling would convert the mitotic division of Spirogyra cells into amitotic, and of Pfeffer and Nathanson, that a

¹ Schaper, A. Die nervösen Elemente der Selachier-Retina in Methylenblaupräparaten, *Festschrift zum siebenzigsten Geburtstag von Carl von Kupffer*, 10 pp., 3 Taf. Jena, 1899.

² Crampton, H. E. An Experimental Study upon Lepidoptera, *Archiv für Entw.-mech.*, Bd. ix, pp. 293-318, Pls. XI-XIII, 1899.